

In the matter of NPRM 03-201:

First, I would like to thank to the Commission for the opportunity address the issues and questions brought out in this NPRM. As an operating WISP, these issues directly affect my ability to effectively bring low cost broadband to the rural markets that I serve. As the Commission is aware, there are a large number of WISPs (Wireless Internet Service Providers) operating under the current rules. While it is difficult to get an exact count of these operations, estimates place the count somewhere between 4000 and 8000. Whatever the count, it is the beginning of the fulfillment of the Commission's stated goal of establishing "regulatory policies that promote competition, innovation, and investment in broadband services and facilities...".

One of the questions posed in the NPRM is regarding changing (or updating) the rules to facilitate some of the more advanced antenna technologies that exist today. As a current operator, I know that it would greatly enhance my coverage area as well as allow for better frequency reuse, if the rules were adjusted to allow for a higher EIRP on sectorized or phased array antenna systems. This increased coverage area would better enable me to provide coverage in areas that are, at this time, not cost effective for me to do so. Additionally, as the NPRM pointed out, I could cover these areas without causing interference to other operators and at the same time, increase the spectrum re-use.

Because of the much more focused beam patterns of these advanced antenna systems, I believe that the rules should be adjusted to more closely resemble ptp systems. I agree that the rules should limit the beamwidth of an individual antenna to a maximum of 120 degrees of coverage. Since this type of antenna more closely resembles a point to point antenna pattern than that of an omni directional antenna, I believe that these should be treated in the same manner as a point to point antenna. I would suggest that the maximum EIRP for this type of antenna be limited to 42dB. This will effectively double the coverage available under the current rules for ptmp systems.

With regard to the question of replacement antennas, I believe that it would be advisable to allow any antenna of equal (or lower) gain to be used in a certified system. This idea goes along with the idea that substitution of technically equivalent components should be allowed to be used together. I think it would be beneficial to allow such a "mixing" of components. While I think deregulation of this nature would be beneficial, I recognise the potential problems this can cause. One solution could be to change the certification from complete systems to certification of components. That is to say that a radio design can be certified as a compliant component if the out of band emissions are acceptable and it's output power is within a reasonable variance of it's "advertised" output. The same standards could be applied to amplifiers and antennas (recognising that the criteria for these will be different). This type of change to the rules would allow operators to select from a wider range of components to build systems that are at or below allowed EIRP, and will allow manufacturers of these components to

bring their respective technologies to market more quickly, and most likely, at a lower cost.

With respect to making available spectrum, I think it would be extremely beneficial to WISPs (and their customer base) to provide new spectrum allocations, specifically for the purpose of outdoor broadband radio equipment. More specifically, I would like to see some spectrum become available in the sub-1GHz area. As the commission is aware, these lower frequencies have propagation characteristics which allow deployment in areas where heavy vegetation or man-made structures make higher frequency broadband solutions unfeasible.

I would like to finish by once again thanking the Commission for the opportunity to address these issues.